Tract #1
Fox Hills formation
Lance Creek Wyo.

dw. 0341

doc. 0341

Karl M. Waage, 1938

7132

2 W

K.C. Baking Powder Box

Fossils from Pierre & Fox Hills in New Castle area.

Tracing Fox Hills west along strike.

(1) Sphenodiscus layer.
Just S. of canyon (# 2) mouth, same layer forms grassy slopes, rises gradually reaching valley, Alton. Just east of fruit orchard sand appears in small bluff at foot of low grassy scarp made by thinly bedded sands. Sphenodiscus zone can be traced by outcropping of weathered concretions near base of grassy slope up to this point. Concretions yellow sandier + grayer inside — Ogalla
Upper clays
Sandy to shaly
~~Sandy~~ K.T.
These rocks

[illegible] but it
is doubtful.

[illegible], about
15-20 ft. wide, full
of shells of 2 forms
[illegible] up to but on
but [illegible] round
Concretions of various
sizes & irregularly
[illegible] arranged
layers. [illegible]
fossils, [illegible]
also traces of shells.
S. Zone must be about
20 ft. thick, at least

[illegible]
[illegible] on ordinary
acre is quite to suit.
[illegible] shells
[illegible] Lower Zone.
[illegible] up

[illegible] of the

Bluff just NE of Rust and well capped by fairly persistent red brown layer, above this is flaty sand.

To the west, sand is capped by more persistent red concretion, sandy greenish & greyish brown mudstone & intermingled with red brown. Sphenachasm above in concretion of grey sand within 15 ft of top of sand. Local clam beds some cephalopods (2) an occasional small shells.

[illegible] out [illegible]
[illegible] a [illegible]
gravel [illegible] sand, cobbles
at top of sand are more
gravelly.

[illegible] sand
above has more coarse
layers of [illegible]
- resistant layers.

Lithology at Station 2

(1) Sand below basal conc. layer on face of scarp is somewhat greyer buff than the above, & is shot thru with vein-like streaks. This sand includes irregularly scattered concretions with some bearing fossils. This zone is related to Johns' zone paleontologically?

(2) The concretionary layer above this, at the base of the massive sand forming the scarp, is not persistent as a definite layer, but is made up of massive concretions, 3 to 6 feet in diameter. The layer is barren, the rock mostly consists of platy spar S.S. cracks on forming the

base of the harder grey core which stains a red brown.

(3) Above this the meadow mud sand lies. The 32 ft up to its contact with overlying layer is barren. It includes many small nodules of limonitic concretions and many sand concretions from 1" to 10" across; the latter ~~has~~ seem to have no lithological difference from the sand except that they are more solidly indurated and are a bit greyer in color. The sand is a buff grayish buff, unindurated but firm, resistant to erosion. It is a medium grained sand.

(4) The overlying layer mucky

*A N 33° W

Fossils 1 Arm
Large Cyclus